

### **REMARKS**

The Office Action dated October 17, 2006, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claim 1 has been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added, and no new issues are raised which require further consideration and/or search. Claims 3 and 9-11 have been withdrawn. Claims 1-2 and 4-8 are submitted for consideration.

Claims 1 was objected to because of informalities. Claim 1 has been amended to overcome this objection. Therefore, Applicants request that this objection be withdrawn.

Claims 1-8 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out the distinctly claim the subject matter which applicant regards as the invention. Claims 1 has been amended to overcome this rejection. Therefore, Applicants request that this rejection be withdrawn.

Claims 1, 2 and 4-8 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,248,747 to Scott (hereinafter Scott). The rejection is traversed as being based on a reference that neither teaches nor suggests the novel combination of features clearly recited in independent claim 1, 2 and 4-8.

Claim 1, upon which claims 2-8 depend, recites a tapping screw including a head portion and a shaft portion extending from the head portion, and forming a female screw

in a prepared hole formed in an attached member while the tip portion of the shaft portion is screwed into the prepared hole. The shaft portion has a columnar constant diameter portion extending from the head portion and having a constant diameter and a reduced diameter portion of a truncated cone shape extending from the tip of the constant diameter portion in the direction opposed to the head portion, and reduced in diameter as it is advanced in the direction opposed to the head portion. The shaft portion also includes a spiral screw thread continuously formed over the outer circumferential face of the constant diameter portion and the outer circumferential face of the reduced diameter portion. Plural notch portions are formed in a specific area of the screw thread in the circumferential direction of the shaft portion. All the notch portions have a notch face, a rising wall and a corner portion. The notch portions are formed by form rolling and the notch portions are shallow such that the core diameter of each notch portion is larger than the core diameter of the screw thread at the same location. The rising wall is approximately perpendicular to the screw rotating direction.

As outlined below, Applicants submit that the cited reference of Scott does not teach or suggest the elements of the presently pending claims.

Scott discloses that a tap has a primary thread zone at its leading end and a secondary thread zone. There are about three turns of the primary thread zone, and the transition from the primary zone to the secondary zone takes place through one turn of the thread. The secondary thread zone has an addendum that is half the radial depth of the final thread which is formed by the secondary thread zone. The diameter of the crests

of the primary thread zone is equal to the diameter of the secondary zone minus the addendum of the secondary thread zone. See Col. 1, line 56-Col. 2, line 3.

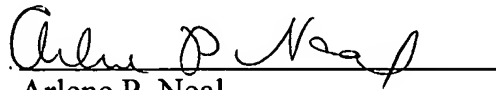
Applicants submit that Scott simply does not teach or suggest each element of claims 1, 2 and 4-8, as noted above. Each of claims 1, 2 and 4-8 recites, in part, notch portions are formed by form rolling. Scott does not teach or suggest this feature. Applicants submit that the effect of forming notch portions by form rolling is that these notch portions are not as sharp as those made by cutting. Therefore, scrapes are not produced when tapping, when the notch portions are formed by form rolling. As noted above, there is no teaching or suggestion in Scott of notch portions being formed by form rolling, as recited in claims 1, 2 and 4-8. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §102(b) should be withdrawn because Scott fails to teach or suggest each feature of claim 1 and hence, dependent claims 2 and 4-8 thereon.

As noted previously, claims 1, 2 and 4-8 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 1, 2 and 4-8 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Arlene P. Neal", is written over a horizontal line.

Arlene P. Neal  
Registration No. 43,828

**Customer No. 32294**  
SQUIRE, SANDERS & DEMPSEY LLP  
14<sup>TH</sup> Floor  
8000 Towers Crescent Drive  
Tysons Corner, Virginia 22182-2700  
Telephone: 703-720-7800  
Fax: 703-720-7802

APN:kmc